Pedestrian Safety

February 29, 2008



CountyStat Principles

- Require Data-Driven Performance
- Promote Strategic Governance
- Increase Government Transparency
- Foster a Culture of Accountability



Agenda

- Introductions
- Data on pedestrian collisions and fatalities
 - Montgomery County data and comparisons with other jurisdictions
 - Four high incidence areas in Montgomery County
- Review of December 2007 Pedestrian Safety Initiative
- Wrap-up



Defining Pedestrian Safety

- The County Executive's Pedestrian Safety Initiative had two objectives:
 - Reduce pedestrian-related crashes, injuries, fatalities, and their associated social and economic costs
 - Ensure that all areas of the County provide safe and convenient travel options for pedestrians
- The following data relates to the first objective: pedestrianrelated crashes (collisions) and fatalities.

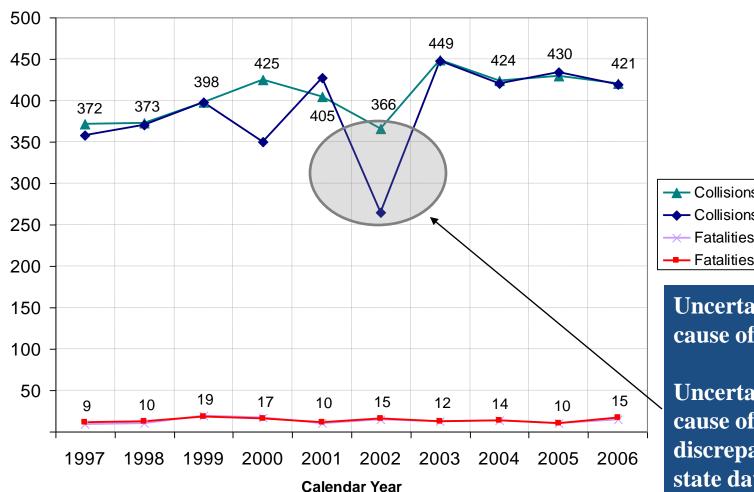


Collision Sites, 2004-2006





Pedestrian Collisions and Fatalities in Montgomery County



→ Collisions: SHA Data

Collisions: MCP Data

--- Fatalities: SHA Data

Fatalities: MCP Data

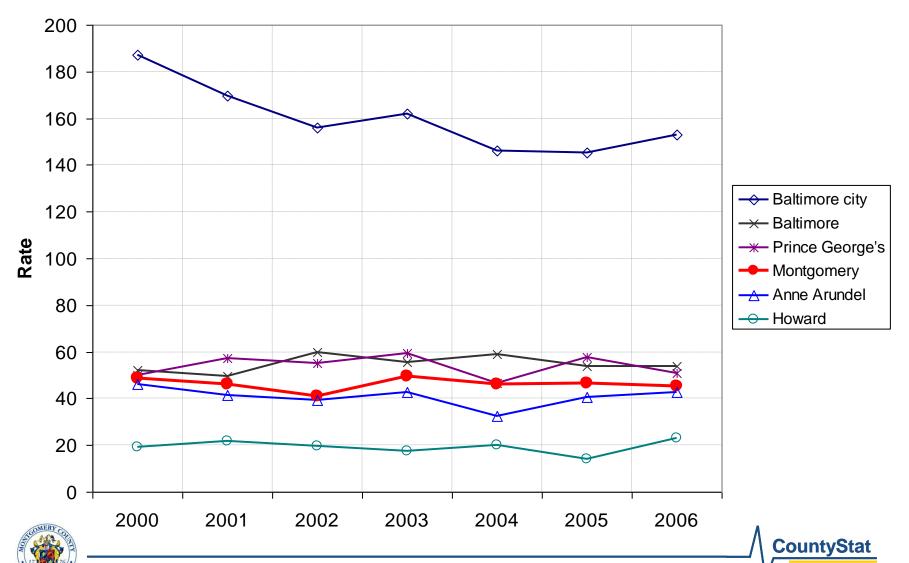
Uncertain about cause of drop.

Uncertain about cause of discrepancy with state data.



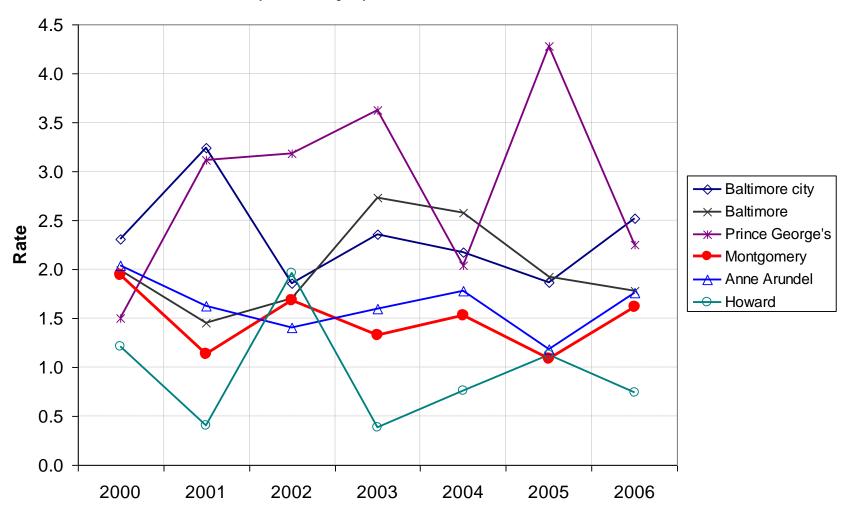
Pedestrian Collision Rates per 100,000 People, by County, 2000-2006

Data sources: Maryland State Highway Administration and the U.S. Bureau of the Census



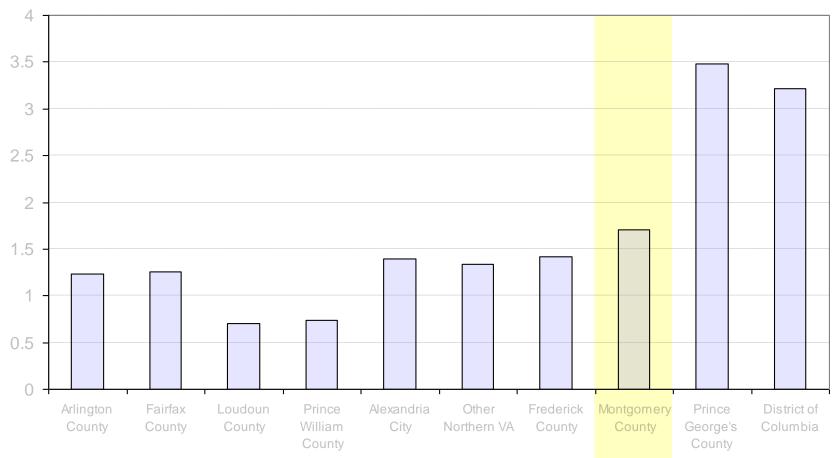
Pedestrian Fatality Rates per 100,000 People, by County, 2000-2006

Data sources: Maryland State Highway Administration and the U.S. Bureau of the Census





Average Annual Pedestrian and Bicyclist Fatalities Per 100,000 people, 1994-2003



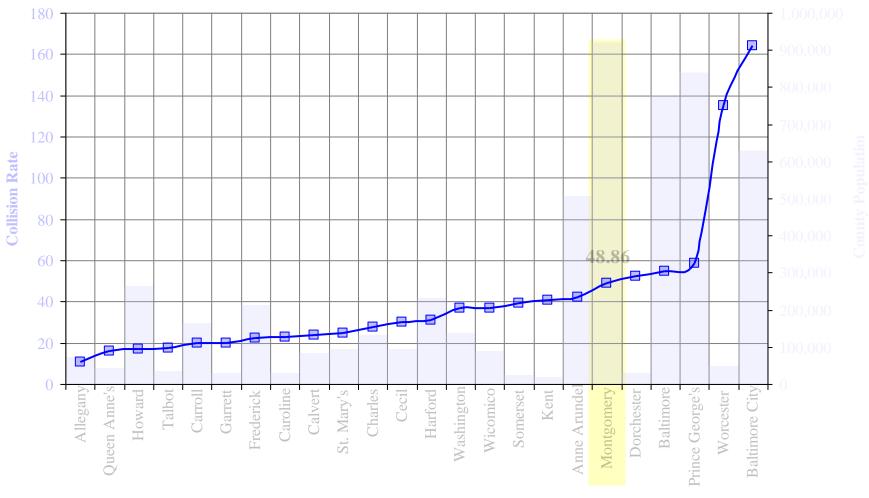
Data source: April 2005 presentation to COG Safety Work Group, "Briefing on the Regional Pedestrian and Bicycle Safety Problem"





Pedestrian Collisions per 100,000 People, by County, 2003

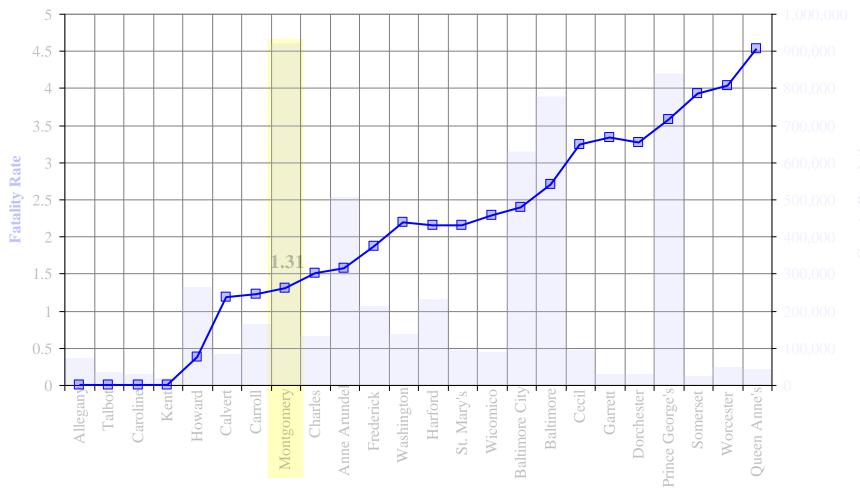
Data source: Maryland Traffic Safety Facts 2003, page 66, SHA





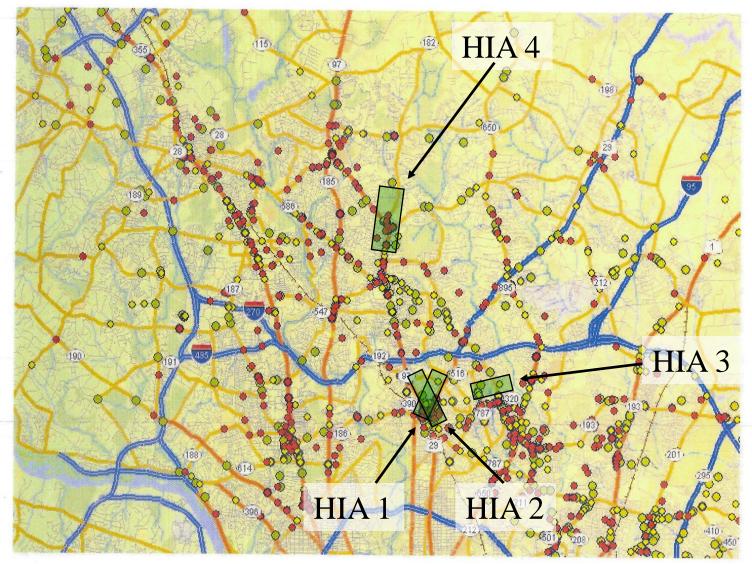
Pedestrian Fatalities per 100,000 People, by County, 2003

Data source: Maryland Traffic Safety Facts 2003, page 66, SHA





High Incidence Areas





High Incidence Areas: Facts

- # of incidents over four-year period: 93
 (from 1/1/2004 11/30/2007)
- These four sites represent about 6% of all pedestrian collisions in the county.
- Three of the four are state-maintained roads.

| | HIA #1 | HIA #2 | HIA #3 | HIA #4 | Total |
|------------------------|--------|--------|--------|--------|-------|
| # collisions | 15 | 26 | 22 | 30 | 93 |
| # pedestrians involved | 18 | 27 | 22 | 31 | 98 |
| # fatalities | 1 | 0 | 0 | 1 | 2 |



HIAs: Scoping the problem

- 57.1% of pedestrians involved were male.
- Age is evenly distributed except for very young (only two were under the age of 10).
- Alcohol is a minor contributor at these sites.
 - In 16.3% of cases, alcohol or some other substance was either present or a contributing factor
 - Only 8 cases of 93 (8.6%) listed "under the influence of alcohol" as a primary or secondary contributing factor for the collision.



HIAs: Scoping the problem

- No cases listed light conditions as "Dark: no street lights"
- Road construction or maintenance was listed as a contributing factor in only one case.
- 46% of the pedestrians were struck entering or crossing at an intersection.
- Top driver movements:
 - 31% were moving at constant speed
 - 19% were turning left
 - 13% were turning right
 - 13% were slowing or stopping



Primary Contributing Factors

| Drivers | | | | |
|--|----|--|--|--|
| Not Applicable | | | | |
| Failed to give full time and attention | 19 | | | |
| <black></black> | 10 | | | |
| Failed to yield right of way | 10 | | | |
| Illegally in roadway | 5 | | | |
| Unknown | 4 | | | |
| Did not comply with license restrictions | 2 | | | |
| Vision obstruction | 2 | | | |
| Wet road | 1 | | | |
| Failed to obey other traffic control | 1 | | | |
| Grand Total | 83 | | | |

| Pedestrians | | | | |
|--|----|--|--|--|
| Illegally in roadway | 29 | | | |
| Not Applicable | 28 | | | |
| Failed to give full time and attention | 15 | | | |
| <blank></blank> | 12 | | | |
| Under influence of alcohol | 7 | | | |
| Unknown | 3 | | | |
| Clothing not visible | 2 | | | |
| Failed to yield right of way | 1 | | | |
| Rain, snow | 1 | | | |
| Grand Total | 98 | | | |





Two Objectives of the Initiative

- Reduce pedestrian-related crashes, injuries, fatalities, and their associated social and economic costs
- Ensure that all areas of the County provide safe and convenient travel options for pedestrians

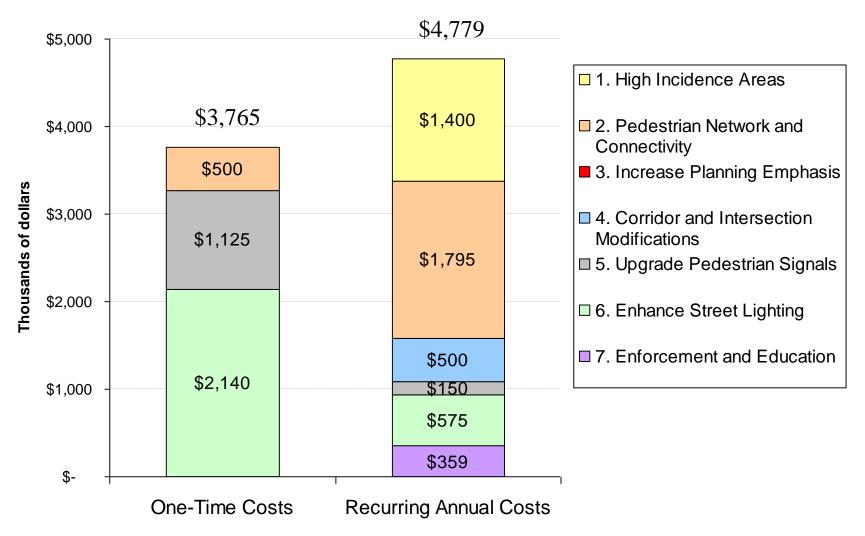


Seven Strategies of the Initiative

- Target most intensive pedestrian safety improvement efforts in High Incidence Areas
- Assess and improve pedestrian network and connectivity needs
- Increase emphasis on pedestrians and bicyclists in the planning process
- Identify and implement corridor and intersection modifications and traffic calming treatments
- Upgrade pedestrian signals
- Assess and enhance street lighting
- Modify pedestrian and driver behavior through enhanced enforcement and educational efforts



Costs Associated with the Seven Strategies





Participants in the Initiative

- DPWT will be designated as the lead agency responsible for pedestrian safety.
- DPWT is the largest participant in the initiative.
- Three components of the initiative were not formally assigned to a department.
- Dollars shown are from the initiative document and do not necessarily reflect budget submissions.

| | Initiative Dollars | | |
|------------|----------------------|-------|--|
| | \$ (in thousands) | % | |
| DPWT | \$7,529 | 88.1% | |
| DPS | \$174 | 2.0% | |
| MCPD | \$172 | 2.0% | |
| PIO | \$50 | 0.6% | |
| M-NCPPC | \$0 | 0.0% | |
| Unassigned | \$620 | 7.3% | |



Measuring Progress on Objectives

Collisions and fatalities

- Number of pedestrian collisions and fatalities
- Average traffic travel speeds
- Pedestrian perceptions of safety

Safe and convenient travel options

- Output measures were specified in the initiative
- Unclear how to measure outcomes



Enhancement of Pedestrian Accommodations in Work Zones

- Initial recommendation to enhance pedestrian accommodations in work zones came from the Pedestrian Safety Advisory Committee
 - "Hire additional inspectors within the Department of Permitting Services dedicated to pedestrian safety and accessibility. This action should be taken by March 31, 2007."-2007 Pedestrian Safety Agenda, page 2
- December 2007 Pedestrian Safety Initiative calls for two additional inspectors at a cost of \$174,000 per year.
 - Inspectors would regularly monitor work zones to ensure compliance with new Road Code requirements for pedestrian accommodations and to enable a quicker response to complaints of sidewalk closures or obstructions.
 - One would cover Silver Spring area, one would cover Bethesda area
- Carla Reid, Director, Department of Permitting Services brought to CountyStat's attention that data supporting this request had not been presented.





Enhancement of Pedestrian Accommodations in Work Zones

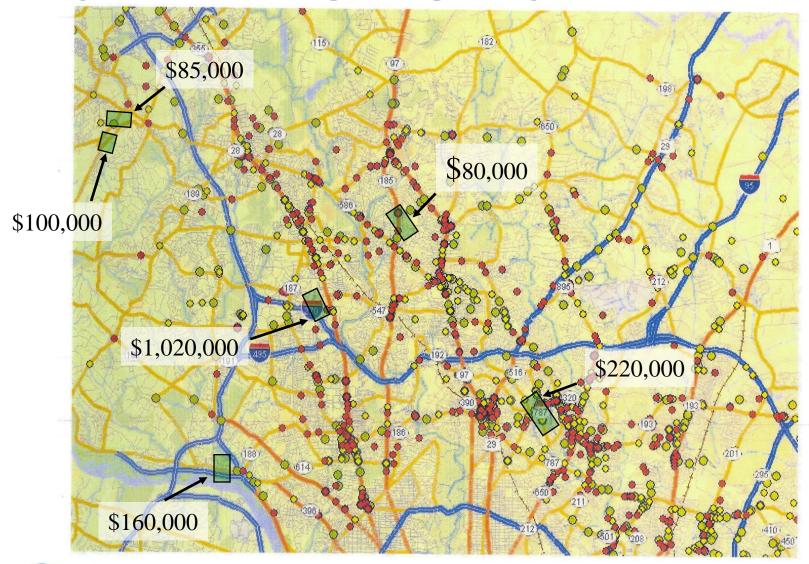
- On very short notice, Police were able to supply data on incidents over the last four years.
- Pedestrian collision data from the Police found only two cases in the last four years where either road construction or debris on the road contributed to the collision.
 - One in 2004, one in 2006. Both in Silver Spring area.
 - Police included any pedestrian collisions that had any one of the following as a contributing factor: road construction, road maintenance, debris in the road, or obstructions in the road.
 - There were not necessarily violations of any rules for pedestrian accommodations in these two cases.
 - Given the proposed inspector assignments, the inspector in Bethesda would not have overlapped either of these cases.

Hiring additional inspectors will have little, if any, impact on the number of pedestrian collisions.





Major Street Lighting Projects



CountyStat

9 additional projects (\$3,800,000 total costs) are in other parts of the county

Procedure for improving HIAs

- Collect and analyze collision data to identify HIAs and their characteristics
- Conduct a pedestrian road safety audit at each site (based upon federal guidelines)
- Collect baseline data on pedestrians' perceptions of safety and on travel speeds at the area
- Present audit findings to stakeholders and incorporate feedback into recommendations
- Implement physical improvements and pedestrian outreach
- Monitor collisions, pedestrians' perceptions, and travel speeds post-implementation

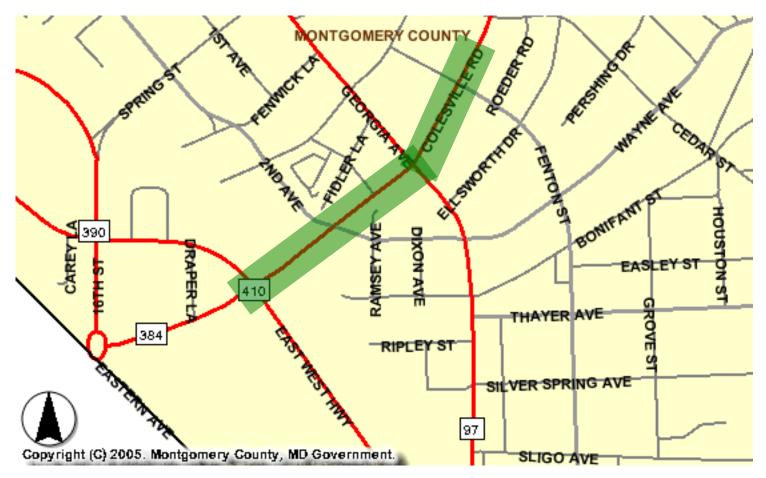


Wrap-up

- Preview of next topics
 - Conduct a mapping process that links strategies to program activities to measureable outcomes.
- Time frame for next meeting



HIA 1: Colesville Road





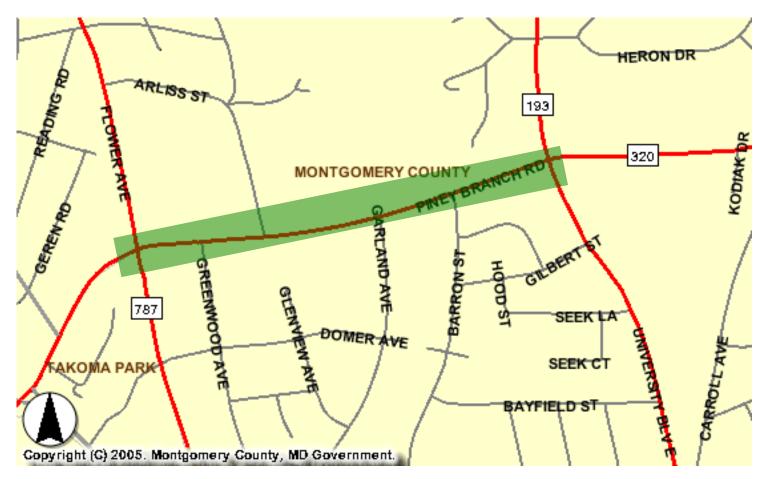
HIA 2: Georgia Ave. (Silver Spring)







HIA 3: Piney Branch Road





HIA 4: Georgia Ave. (Wheaton)

